Docket No.: GAS-013 PATENT

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

- 1. (Original) Tool for the production of cast components, in particular gas turbine components, from reactive nonferrous molten metals, in particular from titanium alloys, wherein the tool is formed as a casting mold, characterized in that at least one area of the casting mold (10) which comes into contact with the reactive nonferrous molten metal is made of yttrium oxide, magnesium oxide and calcium oxide.
- 2. (Original) Tool as defined in claim 1, characterized in that at least one mold wall area of the casting mold (10) which comes into contact with the reactive nonferrous molten metal is made of yttrium oxide, magnesium oxide and calcium oxide.
- 3. (Currently Amended) Tool as defined in claim 1-or-2, characterized in that the casting mold has a construction of at least two layers wherein a first layer (14) forms a mold wall area which comes into contact with the reactive nonferrous molten metal and a second layer (15) forms a backfilling stabilization area for the mold wall area.
- 4. (Original) Tool as defined in claim 3, characterized in that both the first layer (14) and the second layer (15) consist of yttrium oxide, magnesium oxide and calcium oxide wherein the second layer (15) which backfills the first layer (14) has less yttrium oxide and is more coarsely grained than the first layer.

- 5. (Currently Amended) Tool as defined in claim 3, characterized thereby that the second layer (15) has thicker walls than the first layer (14).
- 6. (Original) Method for the production of a casting mold for cast components, in particular gas turbine components, from reactive nonferrous molten metals, in particular from titanium alloys, characterized by the following steps:
  - a) Provision of a component wax model which has the geometrical dimensions of the precision-casting components to be produced with the casting mold,
  - b) Coating of the component wax model with a slurry material consisting of water, yttrium oxide, magnesium oxide and calcium oxide,
  - c) Drying and hardening the coating for the casting mold,
  - d) Removal of the component wax model from the casting mold.
- 7. (Original) Method as defined in claim 6, characterized in that, together with step b), the slurry material is spread in multiple layers on the component wax model.
- 8. (Original) Method as defined in claim 7, characterized in that the slurry material is spread in multiple layers on the component wax model in such a way that a casting mold with at least a two-layer construction is created wherein a first layer of the casting mold forms a mold wall area which comes into contact with the reactive nonferrous molten

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metal, and a second layer of the casting mold forms a stabilization area which backfills the mold wall area.

- 9. (Original) Method as defined in claim 8, characterized in that the first layer of the casting mold is formed by spreading one or more layers of a slurry material consisting of water, yttrium oxide, magnesium oxide and calcium oxide on the component wax model, and that the second layer is formed by spreading one or more layers of a slurry material consisting of water, yttrium oxide, magnesium oxide and calcium oxide on the first layer.
- 10. (Original) Method as defined in claim 9, characterized in that the slurry material for formation of the second layer which backfills the first layer has less yttrium oxide and is more coarsely grained than the slurry material for formation of the first layer.
- 11. (Original) Method for the production of a cast component, in particular a gas turbine component, from reactive nonferrous molten metals, in particular from titanium alloys, characterized by the following steps:
  - a) Provision of a casting mold as defined in one or more of claims 6 to 10,
  - b) Filling the nonferrous molten metal into the casting mold,
  - c) Solidification of the nonferrous molten metal in the casting mold,
  - d) Removal of the cast component from the casting mold.
- 12. (Original) Method as defined in claim 11, characterized in that a titanium aluminum molten alloy is filled into the casting mold to produce a gas turbine component.